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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,193	01/15/2002	Lauri Paatero	9943-003US (2990568US/HM)	7915
570	7590	09/09/2005	EXAMINER CALLAHAN, PAUL E	
AKIN GUMP STRAUSS HAUER & FELD L.L.P. ONE COMMERCE SQUARE 2005 MARKET STREET, SUITE 2200 PHILADELPHIA, PA 19103			ART UNIT 2137	PAPER NUMBER

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/047,193

Applicant(s)

PAATERO, LAURI

Examiner

Paul Callahan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Paper No(s)/Mail Date _____ P.S.

DETAILED ACTION

Response to Amendment

1. Claims 1-8 were pending in this application at the time of the previous Office Action. Claims 1-8 have been cancelled and new claims 9-16 entered by the latest amendment. Claims 9-16 are pending and have been examined.

Response to Arguments

2. Applicant's arguments filed 6-7-2005 have been fully considered but they are not persuasive.

The applicant asserts that the instant claims may be distinguished from the applied prior art because the Herve '216 and Dolan '801 references fail to teach the use of a smart card. Yet such is indeed taught by Herve for example, in the first line of the abstract: "The user has a credit card incorporating electronic devices and/or circuits." Such a card does fall under the standard usage of the term "smart card."

The applicant argues that the instant claims may be distinguished from the teachings of Dolan '801 since Dolan "...clearly does not teach or suggest that the smart card itself be employed for performing the necessary processing steps for authentication purposes." Yet a careful reading of the claim language reveals that nowhere is authentication mentioned in the claim limitations, only that a "response" is generated by the smart card. Additionally, Dolan '801 does indeed perform processing directed towards authentication of the card in the passages cited in the rejection of the claims.

The applicant asserts that the combination of Herve and Dolan is improper because Herve teaches storage of a secret key and would therefore teach away from the combination with Dolan where a secret key is provided to the portable device. The Examiner counters by noting that Herve teaches an alternative provision of a secret code in the form of a user supplied password that is not stored on the smart card. The system of Herve therefore does contemplate use of an externally supplied code. Additionally, Herve was not used to teach the features of the claims involving arrangement of stored secret data; Dolan was used for this purpose. Herve was used to teach the method steps of calculation, and the provision of the secret key from a source external to the smart card would not require any fundamental alteration of these calculation steps.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9, 10, 12 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herve US 4,471,216, and Dolan et al., US 5,604,810.

As for claims 9, 10, and 12, Herve teaches a method of producing a response with a device (abstract) comprising; an input for receiving an input calculation means for producing a response which is responsive to the input and a secret key by utilizing a first predetermined function (col. 1 lines 60-67, col. 2 lines 1-10), and an output for feeding said response further (col. 2 lines 1-10), Dolan teaches the features of the claim not taught by Herve, namely; storing in a memory of the device a key-specific number and a coded key which is calculated by means of the secret key, the key-specific number and a device-specific second predetermined function (col. 3 lines 65-67, col. 4 lines 1-18), and, when producing the response reading said key-specific number and coded key from the memory, calculating the secret key on the basis of said key-specific number and coded key by using the inverse function of said second predetermined function, and utilizing the calculated secret key to produce said response (col. 4 lines 1-15). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature of Dolan et al. into the system of Herve. Motive to make this combination is found for example in col. 2 lines 10-20 of Dolan where the advantage of allowing smart-card authentication without revealing a secret key to a server is discussed.

As for claims 14-16, these claims represent the apparatus carrying out the method of claims 9, 10, and 12 and are therefore rejected on the same basis as those claims.

5. Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herve and Dolan as applied to claims 9 and 12 above, and further in view of Kocher, International Publication Number: WO 99/35782.

As for claim 11, the combination of Herve and Dolan fails to teach the method as claimed in claim 9, characterized by calculating and storing in the memory of the device a new coded key and a new key-specific number when the calculation means have utilized said first predetermined function a predetermined number of times. However Kocher does teach this feature (page 8 lines 25-33). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature of Kocher into the system of Herve and Dolan. It would have been desirable to do so as this would increase the security of key storage.

As for claim 13, the combination of Herve and Dolan fails to teach the device as claimed in claim 12, characterized in that the device comprises; coding means for calculating a new coded key by means of the secret key a new key-specific number to be fed to the coding means, and said second predetermined function, and that the device comprises means for replacing the coded key and the key-specific number

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stored in the memory with the new coded key calculated by the coding means, and the new key-specific number. However Kocher does teach these features (page 8 lines 25 through page 9 line 15). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature of Kocher into the system of Herve and Dolan. It would have been desirable to do so as this would increase the security of key storage.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following US Patent document teaches features pertinent to the applicant's invention:

Gorgens 4,234,932

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E. Callahan whose telephone number is (571) 272-3869. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Emmanuel Moise, can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is: (571) 273-8300.

9/1/05

Paul Callahan

Emmanuel L. Moise
EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER